

re-stoppered, they were still liable to the unexpected evaporation and leakage already described. Hence, without any manner of doubt, the shortage which struck the southern party so hard.

That the oil could have soaked the supplies placed seven feet below the oil tins by escaping through the stopper in the form of vapor, seems impossible. A possible and very plausible explanation of this leakage of oil is the conversion of ordinary tin into the allotropic form, gray tin powder. This change to gray tin powder is known to take place at a maximum rate at -48° C. and may take place more slowly at other temperatures below 18° C. Should this change occur along the soldered seams of the container, the mysterious leakage of oil might well be explained. This peculiar disintegration of tin is also shown by certain alloys of tin. Articles of pewter (tin 4 parts, lead one part) have frequently been known to show such changes and this change has indeed been given the name "museum disease," referring to pewter articles. Farup² claims that the admixture of other metals influences the rate at which said change occurs and in the series zinc, cadmium, copper, silver, lead, the accelerating influence increases in the order given, lead having the greatest accelerating effect. Since hard solder may contain 65 per cent. tin and since pewter is known to show this property, it may also be expected in such a hard solder. If such is the case, it is a good indication of the extreme care which must be exercised to meet the severe and unusual conditions surrounding polar exploration.

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CUBIST SCIENCE

THOSE stanch defenders of the citadel of pure science, who have so long arrayed themselves against the insidious invasion of metaphysics, must now arm themselves to repel a new foe. This is nothing less than that *dernier cri* of esthetic literature—cubism! Those who have come in contact with the

² Cf. "Handbuch d. Anorganische Chemie," Abegg, III, pp. 550.

cubist literature of Gertrude Stein or her disciples and imitators will recognize at once the diagnostic symptoms of infection in an article by P. C. van der Wolk in one of the most sober journals of genetics.¹ This paper is entitled "New Researches into Some Statistics of *Coffea*." Note the apparent innocence of the title. Here are some excerpts:

In both of the former communications we saw how that generally the different curves, *within* the definite end curve, are present in a greater or smaller number of removings; the tops of the different curves remove in all directions, whereby the crucial point is still that the place of those tops is not so arbitrary. . . . I thought in the beginning to have an instance in which all the curves exhibited precisely the same top as was the case with the first four curves. Suddenly however half-way up the tree, the top thrust out a large distance to the right side, and to my astonishment the consequent curves as well as the definite end curve exhibited exactly the same top as curve 5. It is noteworthy that this top-removing happened *suddenly, without transition*. . . . Let us now refer back to both of the previous investigations. We then once more observe all those analyzed curves. Is there then a difference in principle between this newly recorded case and all the others? Is there a difference in principle in the question whether it is *only once* that a top-removing of the curves occurs within the end curve (as in our present case) or that *several times* top-removing takes place (as is the case in the two previous communications). Certainly not. [Italics are the author's.]

The scientific world will await with renewed interest this author's fourth communication, which we understand is to be a statistical study of top-removing in *Cannabis indica*.

J. F. A.

MOTIONS OF ATMOSPHERE

TO THE EDITOR OF SCIENCE: Recent letters from mathematicians and physicists seem to show that there are very few students or professors in our universities who pay much attention to the difficult problems that refer to motions of the atmosphere on a large scale. But surely there must be some physicists who

¹ *Zeitschrift für Induktive Abstammungs- und Vererbungslehre*, 1914, XI, p. 355 ff.